

<110> University of Delhi South Campus  
Dhara Vegetable Oil and Foods Company Limited  
Bisht, Naveen Chandra |  
Jagannath, Arun |  
Gupta, Vibha |  
Burma, Pradeep Kumar  
Pental, Deepak

<130> HSM-DU-AJ |

<160> 18

<210> 1 |

&lt;211&gt; 273

## <212> DNA

**<213> Bacillus amyloliquefaciens**

<400> 1 |

atgaaaaaag	cagtcattaa	cggggaacaa	atcagaagta	tcagcgacct	ccaccagaca	60
ttgaaaaagg	agcttgccct	tccggaatac	tacggtgaaa	acctggacgc	tttatgggat	120
tgtctgaccg	gatgggtcga	gtaccgcctc	gttttggaat	ggaggcagtt	tgaacaaagc	180
aagcagctga	ctgaaaatgg	cgccgagagt	gtgcttcagg	ttttccgtga	agcgaaagcg	240
gaaggctgcg	acatcaccat	catactttct	taa			273

**<210> 2**

&lt;211&gt; 98

&lt;212&gt; PRT

**<213> Bacillus amyloliquefaciens**

**<400> 2**

Met Lys Lys Ala Val Ile Asn Gly Glu Gln Ile Arg Ser Ile Ser Asp  
1 5 10 15

Leu His Gln Thr Leu Lys Lys Glu Leu Ala Leu Pro Glu Tyr Tyr Gly  
20 25 30

Glu Asn Leu Asp Ala Leu Trp Asp Cys Leu Thr Gly Trp Val Glu Tyr  
35 40 45

Pro Leu Val Leu Glu Trp Arg Gln Phe Glu Gln Ser Lys Gln Leu Thr  
50 55 60

Glu Asn Gly Ala Glu Ser Val Leu Gln Val Phe Arg Glu Ala Lys Ala |  
 65 70 75 80

Glu Gly Cys Asp Ile Thr Ile Ile Leu Ser |  
 85 90

<210> 3 |

<211> 273

<212> DNA

<213> Artificial sequence

<220> |

<223> This sequence was artificially generated from a wild type barstar gene |

<400> 3

atgaagaagg ctgtgatcaa tggagaacaa atcagatcta tctcagacct tcatcaaact 60  
 ttgaagaagg agcttgetct tcctgagtac tatggtgaga acttggacgc tttgtgggat 120  
 tgtcttactg gatgggttga gtacctctt gttttggaat ggaggcaatt cgagcaatct 180  
 aagcaactta ctgagaatgg agctgagagc gttcttcaag tgtttagaga agctaaggct 240  
 gaaggatgtg acatcactat cattctttct taa 273

<210> 4

<211> 90

<212> PRT

<213> Bacillus amyloliquefaciens

<400> 4

Met Lys Lys Ala Val Ile Asn Gly Glu Gln Ile Arg Ser Ile Ser Asp  
 1 5 10 15

Leu His Gln Thr Leu Lys Lys Glu Leu Ala Leu Pro Glu Tyr Tyr Gly  
 20 25 30

Glu Asn Leu Asp Ala Leu Trp Asp Cys Leu Thr Gly Trp Val Glu Tyr  
 35 40 45

Pro Leu Val Leu Glu Trp Arg Gln Phe Glu Gln Ser Lys Gln Leu Thr  
 50 55 60

Glu Asn Gly Ala Glu Ser Val Leu Gln Val Phe Arg Glu Ala Lys Ala  
 65 70 75 80

Glu Gly Cys Asp Ile Thr Ile Ile Leu Ser |

85

90 |

<210> 5 |  
 <211> 84  
 <212> DNA  
 <213> Artificial Sequence

<220> |  
 <223> This oligo was synthetically generated |

<400> 5  
 atgaagaagg ctgtgatcaa tggagaacaa atcagatcta tctcagacct tcatcaaact 60  
 ttgaagaagg agcttgctct tctt 84

<210> 6  
 <211> 85  
 <212> DNA  
 <213> Artificial sequence

<220>  
 <223> This oligo was synthetically generated |

<400> 6  
 aagagggtac tcaaccatc cagtaagaca atcccacaaa gcgtccaagt tctcaccata 60  
 gtactcagga agagcaagct ccttc 85

<210> 7  
 <211> 84  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> This oligo was synthetically generated |

<400> 7  
 ggatgggttg agtaccctct tgttttggaa tggaggcaat tcgagcaatc taagcaactt 60  
 actgagaatg gagctgagag cgtt 84

<210> 8  
 <211> 78  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> This oligo was synthetically generated |

<400> 8  
 ttaagaaaga atgatagtga tgtcacatcc ttcagcctta gcttctctaa acacttgaag 60  
 aacgctctca gctccatt 78

<210> 9 |  
<211> 30  
<212> DNA  
<213> Artificial Sequence

<220> |  
<223> This forward primer was synthetically generated

<400> 9  
ggctcgagcc accatgaaga aggctgtgat 30

<210> 10  
<211> 29  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> This reverse primer was synthetically generated

<400> 10  
ctagtctaga ttaagaaaga atgatatg 29

<210> 11  
<211> 17  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> This mutagenic primer was synthetically generated

<400> 11  
tcccacaaag cgtccaa 17

<210> 12  
<211> 17  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> This mutagenic primer was synthetically generated

<400> 12  
ttggacgctt tgtggga 17

<210> 13  
<211> 29  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> This mutagenic primer was synthetically generated

<400> 13

caagagggtg ctcaacccat ccagtaaga

2.

<210> 14

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> This mutagenic primer was synthetically generated

<400> 14

ttttggaatg gaggcaattc gagcaatcta a

31

<210> 15

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> This forward primer for the wild type barstar gene was synthetically generated |

<400> 15

cctcatgaaa aaagcagtca ttaac

25

<210> 16

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> This reverse primer for the wild type barstar gene was synthetically generated |

<400> 16

ggctctagatt aagaaagtat gatggt

26

<210> 17

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> This forward primer for the modified barstar gene was synthetically generated

<400> 17

cctcatgaag aaggtgtga tcaa

24

<210> 18

<211> 29

<212> DNA

<213> Artificial Sequence

<220> |

<223> This reverse primer for the modified barstar gene was synthetically generated

<400> 18

ctagtctaga ttaagaaaga atgatagtg

29